

CLAIMS

What is claimed is:

1. A multi-beam laser scanning unit for scanning a laser beam onto a photoreceptor medium, comprising:

a plurality of laser sources emitting a laser beam;
a collimating lens converting the laser beam into a parallel ray;
a polygon mirror deflecting the converted laser beam from the collimating lens;
a f-θ lens focusing the deflected laser beam onto the photoreceptor medium; and
a transparent member disposed between the f-θ lens and the photoreceptor medium, and having a thickness varying depending on a height thereof perpendicular to a direction where the laser beam passes through the transparent member.

2. The multi-beam laser scanning unit of claim 1, further comprising a movable member for varying the height of the transparent member with respect to the plurality of laser sources.

3. The multi-beam laser scanning unit of claim 2, wherein the transparent member has an inclined lower side inclined with respect to a scanning direction of the laser beam, and the movable member has an inclined surface inclined with respect to the inclined lower side of the transparent member.

4. The multi-beam laser scanning unit of claim 3, further comprising an elastic member formed at an upper side of the transparent member, for pressing the transparent member.

5. The multi-beam laser scanning unit of claim 1, wherein the transparent member has a triangular cross-section in the direction where the laser beam passes through the transparent member.

6. The multi-beam laser scanning unit of claim 1, wherein the transparent member has a trapezoidal cross-section in the direction where the at least two laser beams pass through the transparent member.

7. The multi-beam laser scanning unit of claim 1, wherein the transparent member has an optical refractivity of at least 1.